

Appl. No. 10/045,515  
Amdt. dated March 7, 2005  
Reply to Office Action of December 13, 2004

PATENT

**Amendments to the Drawings:**

The attached sheet of drawings includes added Fig. 7D. This sheet, which includes Figs. 7A - 7D replaces the original sheet that includes Figs. 7A - 7C.

Attachment: Replacement Sheet  
Annotated Sheet Showing Changes

**REMARKS/ARGUMENTS**

Claims 1-3, 9-11, and 14-21 are currently pending. Claims 1, 3, 9, 14, 17, and 19 have been amended. Claims 4-8 and 12-13 were previously canceled. No new matter has been added. Support for amendments to claims 1, 3, 9, 14, 17, and 19 may be found in the specification as originally filed at page 6, lines 10 - 13 among other places.

**Drawing Remarks**

The drawings are objected to under 37 CFR 1.83(a) as the drawings must show every feature of the invention specified in the claims. Fig. 7D has been added to address the objection. Fig. 7D adds no new matter to the application as originally filed. Support for Fig. 7D may be found in the specification as originally filed at page 6, lines 10-13, and in originally filed Fig. 7A among other places. Specifically, the embodiment of the invention shown in Fig. 7A is described in the specification, as originally filed, as being bent into spirals, coils, or serpentines. Fig. 7D merely shows the embodiment of Fig. 7A as serpentine. The attached replacement drawing sheet includes Figs. 7A - 7D and replaces the original drawing sheet that includes Figs. 7A - 7C. Applicant respectfully requests the Examiner enter the replacement drawing sheet as no new matter is added to the application.

**Rejections**

Claims 1 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Guanella (U.S. Patent No. 2,470,307) in view of Thomas (U.S. Patent No. 3,654,570).

Claims 2, 9-11, and 14-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamazaki et al. (US Patent No. 5,283,087) in view of Guanella and Thomas.

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Guanella and Thomas as applied to claim 1, and further in view of Heiter (U.S. Patent No. 5,933,770).

Section 103(a) Rejection Remarks

Claim 1 has been amended to overcome the rejection over Guanella in view of Thomas. Specifically, Guanella describes a first coil and a second coil that are inductively coupled. The first coil is disposed in an insulating cylinder and the second coil is disposed outside of the insulating cylinder. The coils inductively transfer current to one another, or form a current choke for currents that are oppositely directed along the coils. See Guanella at col. 2, lines 9-44 and Fig. 1.

Thomas describes a junction wherein a first conductor is inductively coupled to a second conductor. At an inductively coupled region of the inductors, the inductors are disposed in a central insulator in a single hole formed therein. The hole is straight in the region in which the conductors are inductively coupled.

In contrast, the matching network as recited in amended claim 1 includes "an insulator having first and second holes formed therein, wherein the first transmission line is disposed in the first hole and the second transmission line is disposed in the second hole, and wherein the insulator is bent substantially similar to the first transmission line and the second transmission line." Nowhere do Guanella and/or Thomas show or suggest an insulator that has two holes formed therein, wherein the holes have transmission lines disposed, respectively, in the holes. Moreover, nowhere do Guanella and/or Thomas show or suggest an insulator that is bent substantially similar to a set of transmission lines. Therefore, Guanella and Thomas, either alone or in combination, fail to show or suggest every limitation of claim 1. Therefore, Guanella and Thomas fail to render claim 1 obvious.

Claims 9, 14, 17, and 19 have each been amended to include limitations similar to the limitations of amended claim 1 distinguished from Guanella and Thomas above. Therefore, for at least the foregoing reasons, Guanella and Thomas fail to render claims 3, 9, 14, 17, and 19 obvious. Yamazaki fails to make up for any the above described deficiencies of Guanella and Thomas. Specifically, Yamazaki discusses a plasma processing chamber configured to receive an etchant gas for etching a set of wafers. The plasma processing chamber is supplied ac energy from one or more ac energy sources (see 15 in Yamazaki's FIG. 1, and 45 in Yamazaki's FIG. 4).

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The ac energy source is coupled to the plasma processing chamber by a matching transformer (see 16 in Yamazaki's FIG. 1). Nowhere does Yamazaki show or suggest that the Yamazaki matching transformer includes an insulator that has two holes formed therein, wherein the holes have transmission lines disposed, respectively, in the holes. Moreover, nowhere does Yamazaki show or suggest an insulator that is bent substantially similar to a set of transmission lines. Therefore, Yamazaki fails to make up for the deficiencies of Guanella and Thomas. Therefore, Guanella, in view of Thomas and Yamazaki, fails to render claims 9, 14, 17, and 19 obvious.

### CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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Annotated Sheet Showing Changes for Figs. 7A - 7D

Added Fig. 7D

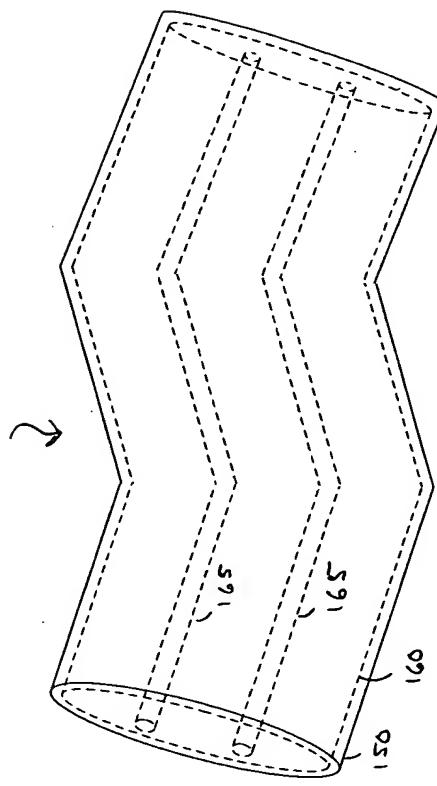


Fig. 7D

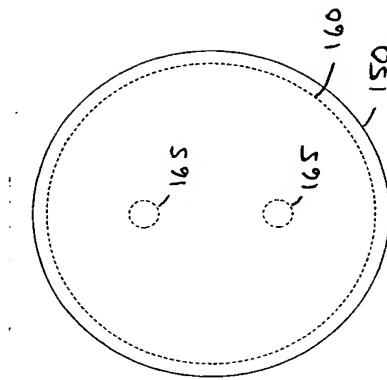
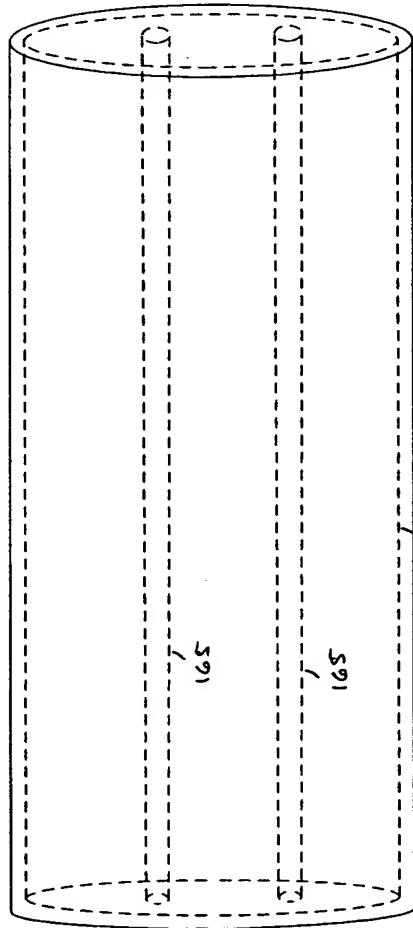
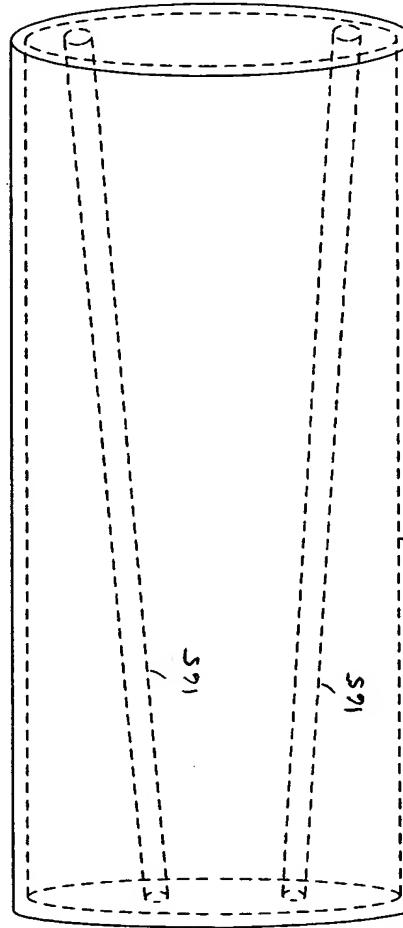


Fig. 7A



160 165 Fig. 7B



160 165 Fig. 7C